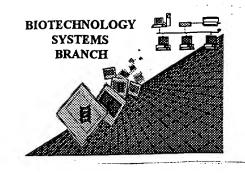
Nisho!

RAW SEQUENCE LISTING ERROR REPORT



P#8

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number	09/451,739A	• .
rippinoution bottur rumoor.		٠٠.
Source:		RECEIVED
Date Processed by STIC:	7/12/2000	HEGEIVED

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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APPLICANT BY

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

1642

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/451,739A

DATE: 07/12/2000 TIME: 15:56:26

Input Set : A:\lud-5615.txt

Output Set: N:\CRF3\07122000\I451739A.raw

```
Does Not Comply
                                                                                  Corrected Diskette Needed
1 <110> APPLICANT: Jager, Dirk
         Scanlan, Matthew
 3
         Gure, Ali
         Jager, Elke
         Knuth, Alexander
         Old, Lloyd
         Chen, Yao-tseng
 9 <120> TITLE OF INVENTION: Isolated Nucleic Acid Molecules Encoding Cancer Associated Antigens,
10 the Antigens per se, and Uses Thereof
12 <130> FILE REFERENCE: LUD 5615
14 <140> CURRENT APPLICATION NUMBER: 09/451,739A
16 <141> CURRENT FILING DATE: 1999-11-30
18 <160> NUMBER OF SEQ ID NOS: 19
```

ERRORED SEQUENCES

527 <210> SEQ ID NO: 16
528 <211> LENGTH 528
529 <212> TYPE: PRT
520 <212> TYPE: PRT

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530 <213> ORGANISM: Homo sapiens

W 531 <220> FEATURE: W 532 <400> SEQUENCE: 16

561 145

533 Met Lys Val Ser Ile Pro Thr Lys Ala Leu Glu Leu Met Asp Met Gln 10 536 Thr Phe Lys Ala Glu Pro Pro Glu Lys Pro Ser Ala Phe Glu Pro Ala 537 20 25 30 539 Ile Glu Met Gln Lys Ser Val Pro Asn Lys Ala Leu Glu Leu Lys Asn 35 40 542 Glu Gln Thr Leu Arg Ala Asp Glu Ile Leu Pro Ser Glu Ser Lys Gln 543 50 55 60 545 Lys Asp Tyr Glu Glu Ser Ser Trp Asp Ser Glu Ser Leu Cys Glu Thr 75 548 Val Ser Gln Lys Asp Val Cys Leu Pro Lys Ala Thr His Gln Lys Glu 549 85 90 95 551 Ile Asp Lys Ile Asn Gly Lys Leu Glu Glu Ser Pro Asp Asn Asp Gly 100 105 110 554 Phe Leu Lys Ala Pro Cys Arg Met Lys Val Ser Ile Pro Thr Lys Ala 555 115 120 125 557 Leu Glu Leu Met Asp Met Gln Thr Phe Lys Ala Glu Pro Pro Glu Lys 558 130 135 140 560 Pro Ser Ala Phe Glu Pro Ala Ile Glu Met Gln Lys Ser Val Pro Asn

563 Lys Ala Leu Glu Leu Lys Asn Glu Gln Thr Leu Arg Ala Asp Gln Met

566 Phe Pro Ser Glu Ser Lys Gln Lys Lys Val Glu Glu Asn Ser Trp Asp

155

170

150

165

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RAW SEQUENCE LISTING

DATE: 07/12/2000 TIME: 15:56:26

PATENT APPLICATION: US/09/451,739A

Input Set : A:\lud-5615.txt

Output Set: N:\CRF3\07122000\I451739A.raw

569 Ser Glu Ser Leu Arg Glu Thr Val Ser Gln Lys Asp. Val Cys Val Pro 195 200 572 Lys Ala Thr His Gln Lys Glu Met Asp Lys Ile Ser Gly Lys Leu Glu 210 215 220 575 Asp Ser Thr Ser Leu Ser Lys Ile Leu Asp Thr Val His Ser Cys Glu 576 225 230 235 240 235 578 Arg Ala Arg Glu Leu Gln Lys Asp His Cys Glu Gln Arg Thr Gly Lys E--> 579 ' 260 245 265 250 270 270 255 581 Met Glu Gln Met Lys Lys Lys Phe Cys Val Leu Lys Lys Lys Leu Ser

E--> 582 275 200 280 200 285 273

584 Glu Ala Lys Glu Ile Lys Ser Gln Leu Glu Asn Gln Lys Val Lys Trp

E--> 585 290 27) 295 780 310

587 Glu Gln Glu Leu Cys Ser Val Arg Leu Thr Leu Asn Gln Glu Glu Glu GLu

E--> 588 305 310 315 320 590 Lys Arg Arg Asn Ala Asp Ile Leu Asn Glu Lys Ile Arg Glu Glu Leu 325 330 E--> 591 593 Gly Arg Ile Glu Glu Gln His Arg Lys Glu Leu Glu Val Lys Gln Gln 340 345 350 E--> 594 596 Leu Glu Gln Ala Leu Arg Ile Gln Asp Ile Glu Leu Lys Ser Val Glu E--> 597 355 360 365 599 Ser Asn Leu Asn Gln Val Ser His Thr His Glu Asn Glu Asn Tyr Leu E--> 600 370 375 380 602 Leu His Glu Asn Cys Met Leu Lys Lys Glu Ile Ala Met Leu Lys Leu 603 385 390 400 E--> 603 385 605 Glu Ile Ala Thr Leu Lys His Gln Tyr Gln Glu Lys Glu Asn Lys Tyr E--> 606 405 410 415 608 Phe Glu Asp Ile Lys Ile Leu Lys Glu Lys Asn Ala Glu Leu Gln Met 420 E--> 609 425 611 Thr Leu Lys Leu Lys Glu Glu Ser Leu Thr Lys Arg Ala Ser Gln Tyr E--> 612 435 440 445 614 Ser Gly Gln Leu Lys Val Leu Ile Ala Glu Asn Thr Met Leu Thr Ser E--> 615 450 455 460 617 Lys Leu Lys Glu Lys Gln Asp Lys Glu Ile Leu Glu Ala Glu Ile Glu 470 -> 618 465 475 620 Ser His His Pro Arg Leu Ala Ser Ala Val Gln Asp His Asp Gln Ile E--> 621 485 490 495 623 Val Thr Ser Arg Lys Ser Gln Glu Pro Ala Phe His Ile Ala Gly Asp 500 505 510 626 Ala Cys Leu Gln Arg Lys Met Asn Val Asp Val Ser Ser Thr Asp Ile 515

numbering of

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 07/12/2000 TIME: 15:56:27

PATENT APPLICATION: US/09/451,739A

Input Set : A:\lud-5615.txt

Output Set: N:\CRF3\07122000\I451739A.raw

L:25 M:283 W: Missing Blank Line separator, <220> field identifier L:28 M:283 W: Missing Blank Line separator, <400> field identifier L:35 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1 L:35 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1 L:86 M:283 W: Missing Blank Line separator, <220> field identifier L:87 M:283 W: Missing Blank Line separator, <400> field identifier L:133 M:283 W: Missing Blank Line separator, <220> field identifier L:134 M:283 W: Missing Blank Line separator, <400> field identifier L:166 M:283 W: Missing Blank Line separator, <220> field identifier L:167 M:283 W: Missing Blank Line separator, <400> field identifier L:203 M:283 W: Missing Blank Line separator, <220> field identifier L:204 M:283 W: Missing Blank Line separator, <400> field identifier L:264 M:283 W: Missing Blank Line separator, <220> field identifier L:265 M:283 W: Missing Blank Line separator, <400> field identifier L:313 M:283 W: Missing Blank Line separator, <220> field identifier L:314 M:283 W: Missing Blank Line separator, <400> field identifier L:365 M:283 W: Missing Blank Line separator, <220> field identifier L:368 M:283 W: Missing Blank Line separator, <400> field identifier L:391 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:8 L:391 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:8 L:400 M:283 W: Missing Blank Line separator, <220> field identifier L:401 M:283 W: Missing Blank Line separator, <400> field identifier L:409 M:283 W: Missing Blank Line separator, <220> field identifier L:410 M:283 W: Missing Blank Line separator, <400> field identifier L:418 M:283 W: Missing Blank Line separator, <220> field identifier L:419 M:283 W: Missing Blank Line separator, <400> field identifier L:427 M:283 W: Missing Blank Line separator, <220> field identifier L:428 M:283 W: Missing Blank Line separator, <400> field identifier L:436 M:283 W: Missing Blank Line separator, <220> field identifier L:437 M:283 W: Missing Blank Line separator, <400> field identifier L:445 M:283 W: Missing Blank Line separator, <220> field identifier L:446 M:283 W: Missing Blank Line separator, <400> field identifier L:454 M:283 W: Missing Blank Line separator, <220> field identifier L:457 M:283 W: Missing Blank Line separator, <400> field identifier L:512 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15 L:512 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15 L:516 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15 L:516 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15 L:520 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15 L:520 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15 L:522 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15 L:522 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15 L:524 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15 L:524 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15 L:531 M:283 W: Missing Blank Line separator, <220> field identifier L:532 M:283 W: Missing Blank Line separator, <400> field identifier L:579 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16 L:582 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16

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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/451,739A

DATE: 07/12/2000
TIME: 15:56:27

Input Set : A:\lud-5615.txt

Output Set: N:\CRF3\07122000\I451739A.raw

```
L:585 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:588 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:591 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:594 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:597 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:597 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:600 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:603 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:606 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:607 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:615 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:615 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:618 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:621 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:624 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:627 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:627 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:627 M:252 E: No. of Seq. differs, <211>LENGTH:Input:528 Found:512 SEQ:16
L:634 M:283 W: Missing Blank Line separator, <220> field identifier
L:643 M:283 W: Missing Blank Line separator, <220> field identifier
L:644 M:283 W: Missing Blank Line separator, <400> field identifier
L:653 M:283 W: Missing Blank Line separator, <400> field identifier
L:653 M:283 W: Missing Blank Line separator, <400> field identifier
L:653 M:283 W: Missing Blank Line separator, <400> field identifier
```